

OSS); Brown Aff. (App. A, Tab 5) (LSC and LOC); Ehr IL Aff.; Ehr IN Aff.; Ehr OH Aff.; Ehr WI Aff. (performance in Illinois, Indiana, Ohio, and Wisconsin); Brown/Cottrell/Flynn Joint Aff. (App. A, Tab 6) (billing); Muhs Aff. (App. A, Tab 33) (provisioning, maintenance, and repair); see also Georgia/Louisiana Order ¶ 102; Kansas/Oklahoma Order ¶¶ 104-105; New York Order ¶¶ 88, 90. These systems are in place, fully operational, handling commercial volumes, and satisfy the requirements of the Act in all respects. Indeed, that conclusion is supported by BearingPoint's comprehensive and independent third-party tests in each of the four states. Significantly, BearingPoint conducted four separate tests – each of which the applicant BOCs passed with flying colors. See Cottrell/Lawson Joint Aff. ¶ 7 & Attachs. A-D. That conclusion is also supported by the state commissions of Illinois, Indiana, Ohio, and Wisconsin, all of which conducted extensive, open proceedings as to SBC Midwest's OSS compliance with checklist requirements.⁹⁵ See Cottrell/Lawson Joint Aff. ¶ 10.

Commercial Usage. This Commission has repeatedly found that the most probative evidence that a BOC's OSS are operationally ready is actual commercial usage. See Georgia/Louisiana Order App. D, ¶ 31; Arkansas/Missouri Order App. D, ¶ 31; Kansas/Oklahoma Order ¶ 105; New York Order ¶ 89. There is no doubt that the BOC applicants' OSS are handling commercial volumes. See Cottrell/Lawson Joint Aff. ¶¶ 12-17.

⁹⁵ See, e.g., ICC Final Order ¶ 1370 (finding that SBC Illinois' application – including the strong evidence of commercial usage, BearingPoint's comprehensive third-party test, as well as the compliance plans filed by SBC Illinois – “clearly would support a favorable recommendation to the FCC”); PSCW Phase II Final Order at 18 (concluding that Wisconsin Bell provided the PSCW with a “‘quantum and quality of evidence’ sufficient to reasonably conclude that this record demonstrates SBC is [in] threshold compliance with § 251(c)(3), unbundled access for purposes of § 271”); PUCO Final Report and Evaluation, App. A at 19 (“[F]or the purposes of Section 271 relief, SBC Ohio has satisfied all OSS-related checklist requirements.”); IURC Compliance Order at 12 (declaring support of SBC Indiana's application to the FCC pending resolution of a few areas of concern).

Between January and May 2003, for example, the EDI interface used by SBC throughout its Midwest region processed over 3.4 million pre-ordering transactions and was used to create more than three million service orders. See id. ¶¶ 13, 15. During that same time, the Common Object Request Broker Architecture (“CORBA”) interface processed more than 8.8 million pre-order transactions, while the Enhanced Verigate pre-ordering interface used throughout SBC’s Midwestern states processed more than 3.4 million pre-ordering transactions. See id. ¶ 13.

SBC Midwest’s ability to handle the increasing commercial volumes in Illinois, Indiana, Ohio, and Wisconsin also demonstrates that its electronic and manual OSS are sufficiently scalable to meet reasonably foreseeable CLEC demands. See id. ¶¶ 18-22; see also id., Attachs. A-D ¶¶ 13-26 (BearingPoint’s successful third-party test of the scalability of SBC Midwest’s OSS); Brown Aff. ¶¶ 13-18; 48-51. Indeed, SBC uses the same system scalability process in the SBC Midwest region as the ones previously reviewed and found compliant by the FCC in successful applications for the SWBT and West regions. See Cottrell/Lawson Joint Aff. ¶ 18.

Third-Party Test. In addition to its strong evidence of actual commercial performance, SBC Midwest’s electronic systems also underwent an exhaustive OSS Test conducted by independent third parties in each of the four states that are the subject of this Joint Application. See Cottrell/Lawson Joint Aff. ¶ 7. See also id., Attachs. A-D ¶¶ 3-6. Importantly, this Joint Application is supported by four separate tests of SBC Midwest’s OSS, which are essentially the same in each state. See id.⁹⁶ BearingPoint and Hewlett-Packard Company (“HPC”) were retained to conduct the OSS tests. See Cottrell/Lawson Joint Aff., Attachs. A-D ¶¶ 2, 8. CLECs and other interested parties participated throughout all stages of the third-party tests in each of

⁹⁶ See also Johnson Aff. ¶¶ 32, 44-46; Butler Aff. ¶¶ 32-33, 51; McKenzie Aff. ¶¶ 18, 46-48; VanderSanden Aff. ¶¶ 21-22, 46-49.

the four states – from the selection of the testers and the development of the Master Test Plans all the way through the actual testing process – in collaboratives, weekly conference calls, and other contacts. See id., Attachs. A-D ¶¶ 11-12. Ultimate decision-making authority retained by the state commissions. See id., Attachs. A-D ¶ 9.

Using a military-style, test-until-pass philosophy, BearingPoint evaluated SBC Midwest's OSS in Illinois, Indiana, Ohio, and Wisconsin based on approximately 500 applicable evaluation criteria covering all five OSS functions – pre-ordering, ordering, provisioning, maintenance and repair, and billing – along with general OSS management.⁹⁷ See id., Attachs. A-D ¶¶ 1, 10. As discussed in more detail in Attachments A through D of the Cottrell/Lawson Joint Affidavit, SBC passed each of the four tests with flying colors. See id., Attach. A ¶ 1 (95 percent of 496 applicable criteria satisfied in Illinois), Attach. B ¶ 1 (95% of 502 applicable criteria satisfied in Indiana), Attach. C ¶ 1 (95 percent of 502 applicable criteria satisfied in Ohio), Attach. D ¶ 1 (95 percent of 498 applicable criteria satisfied in Wisconsin).⁹⁸

As it has in other states where it has performed third-party tests, BearingPoint took numerous precautions to ensure that the test was, to the extent possible, independent and blind. See id., Attachs. A-D ¶¶ 8-9. For example, BearingPoint and HPC established a fully operational "Test CLEC" to conduct several elements of the testing. See id., Attachs. A-D ¶¶ 5, 8. BearingPoint also relied on publicly available SBC documents and processes to conduct test

⁹⁷ In each of the four third-party tests, BearingPoint found 12 evaluation criteria to be "not applicable," and therefore were excluded from the results. See Cottrell/Lawson Joint Aff., Attachs. A-D ¶ 1 n.1.

⁹⁸ Some of the test criteria were found by BearingPoint to be "indeterminate, meaning that there was a lack of commercial usage, data was not available at the time of the report, or the item was still being tested." See Cottrell/Lawson Joint Aff., Attach. A ¶ 29 & n.47, Attach. B ¶ 29 & n.46, Attach. C ¶ 29 & n.45, Attach. D ¶ 29.

transactions. See id. Attachs. A-D ¶ 8. Moreover, BearingPoint conducted each of the four tests under the daily supervision of the state commissions and their staffs. See id., Attachs. A-D ¶ 9. These are the same protective measures the Commission has found adequate in prior 271 orders. See id. ¶ 32; California Order ¶ 76; New Jersey Order ¶¶ 83-85.

The results of the four, third-party tests conducted in Illinois, Indiana, Ohio, and Wisconsin provide overwhelming evidence that the BOC applicants' OSS are checklist compliant. Indeed, as the ICC recently stated, "[w]ithout a doubt, [Illinois Bell], BearingPoint and [HPC], with the able assistance of the [ICC] Staff and with full CLEC participation, have successfully engaged in one of the most comprehensive OSS Operational tests in the nation." ICC Final Order ¶ 1365. The ICC further concluded that "[t]he BearingPoint independent test results persuasively reaffirm the results of commercial performance." Id.⁹⁹

As discussed below, the commercial evidence, coupled with the results of the independent third-party test, demonstrates that SBC Midwest provides CLECs operating in Illinois, Indiana, Ohio, and Wisconsin with nondiscriminatory access to each of the key OSS functions identified in the Commission's orders.

a. Pre-ordering

In addition to manual processes for pre-ordering through the LSC, CLECs in SBC's Midwestern states are offered a choice of three "real time" electronic interfaces – Enhanced Verigate, and the industry standard Electronic Data Interchange ("EDI") and CORBA interfaces. See Cottrell/Lawson Joint Aff. ¶ 50.

⁹⁹ See also PSCW Phase II Final Order at 17 ("The [PSCW] concludes that third party test results demonstrate that [Wisconsin Bell] is providing its competitors nondiscriminatory access to unbundled network elements in accordance with the requirements of §§ 251(c)(2) and 252(d)(1).").

Using these pre-ordering interfaces, CLECs are able to perform the following pre-ordering functions, among others: (1) retrieve customer service information (“CSI”); (2) validate addresses; (3) select and reserve telephone numbers; (4) determine services and features available to a customer; (5) obtain due date availability; (6) access loop qualification information¹⁰⁰; (7) view a customer’s directory listing; and (8) check the status of pending orders. See Cottrell/Lawson Joint Aff. ¶ 54; California Order ¶ 81 n.258; New York Order ¶ 132.

Enhanced Verigate is a graphical user interface, which is launched from the web-based SBC Toolbar platform that operates with Windows,TM provides CLECs with access in plain English to pre-ordering functions available from the “legacy” systems used in SBC’s Midwestern states. See Cottrell/Lawson Joint Aff. ¶ 59. Enhanced Verigate is designed to work like an Internet web browser, and was designed as a pre-ordering interface for CLECs that did not wish to pursue the development of the software programs required for the application-to-application pre-ordering interfaces – EDI and CORBA. Id. ¶ 60. As part of the 13-state POR release, SBC implemented the LSPOR 5 version of Enhanced Verigate in SBC’s Midwestern states on April 20, 2002. See id. ¶ 59. CLECs are using Enhanced Verigate for pre-ordering transactions in commercial volumes. In May 2003, CLECs submitted more than 690,000 pre-order transactions via Enhanced Verigate. See id. ¶ 62. And since June 2002, Enhanced Verigate has processed more than 6.8 million pre-order transactions. See id. & Attach. F (providing data by month of CLEC use of Enhanced Verigate over the last 12 months).

¹⁰⁰ Loop qualification is discussed infra Part III.D.1.

EDI and CORBA are both structural protocols based on industry-wide standards. See id. ¶¶ 55, 57. EDI and CORBA overlay (or “front-end”) the same back office application functionality, data content, and performance standards that are available to SBC personnel, while at the same time allowing for an industry standard application-to-application interface that can be integrated with CLECs’ own systems and that supports both resale services and UNEs. See id. ¶¶ 55-56. Moreover, the EDI and CORBA pre-ordering gateways can be integrated with the EDI ordering gateway. See id. ¶ 56. Like Enhanced Verigate, actual commercial usage of EDI and CORBA has been extensive. In May 2003, EDI and CORBA processed more than 2.8 million pre-order transactions. See id. ¶ 58. Since June 2002, EDI and CORBA have processed over 24.5 million commercial pre-order transactions for CLECs in the SBC Midwest region. See id. See also id., Attach. E (providing data by month for CLEC use of EDI and CORBA over the last 12 months).

SBC Midwest’s performance in the four states confirms that the BOC applicants offer CLECs nondiscriminatory access to pre-ordering functionality. See, e.g., ICC Final Order ¶ 1326 (“[T]he record as a whole shows SBC Illinois to provide nondiscriminatory access to the pre-order functions.”). Despite the large commercial volumes, EDI and CORBA pre-order and Enhanced Verigate are consistently available when scheduled. In all four states, between March and May 2003, EDI and CORBA pre-order and Enhanced Verigate were available for more than 99.50 percent of the time they were scheduled to be available in at least two out of the three months. See Ehr IL Aff. ¶ 62 (PM 4).¹⁰¹

¹⁰¹ See also Ehr WI Aff. ¶ 55; Ehr OH Aff. ¶ 55; Ehr IN Aff. ¶ 56.

In addition, between March and May 2003, SBC Midwest performance in providing timely responses to CLEC pre-ordering transactions in the Enhanced Verigate, CORBA and EDI interfaces has also been excellent. In Illinois, Wisconsin and Ohio, the BOC applicants met or exceeded the benchmarks in at least two out of the three months for 11 of the 13 submeasures for responsiveness to pre-ordering transactions. See Ehr IL Aff. ¶ 35; Ehr OH Aff. ¶ 34; Ehr WI Aff. ¶ 35. And Indiana Bell met or exceeded the benchmarks in at least two out of the three months for nine of the 11 submeasures for responsiveness to pre-ordering transactions. See Ehr IN Aff. ¶ 34.¹⁰² Finally, the commercial readiness of SBC Midwest's pre-ordering interfaces in each of the applicants' states was confirmed by BearingPoint's third-party test. See Cottrell/Lawson Joint Aff. Attachs. A-D ¶¶ 16-20, 31 (discussing third-party functional and capacity testing of SBC Midwest's pre-ordering interfaces).

¹⁰² Although SBC Midwest missed the benchmark in all four states for PM 2-42 (Percent Responses Received Within 30 Seconds OSS Interface – Actual LMU Information requested (five or less loops searched)) and PM 2-43 (Percent Responses Received Within 30 Seconds OSS Interface – Actual LMU Information requested (greater than five loops searched)), CLECs were not denied a meaningful opportunity to compete. SBC Midwest only recently separated the responses into these two categories; previously, all transactions were captured under PM 2-42, which measured requests for 5 loops or less, regardless of the number of searches required to satisfy the request. With the recent change, the performance of the BOC applicants has increased markedly, missing the benchmark by less than 3.5 percent in all four states in May 2003. See Cottrell/Lawson Joint Aff. ¶ 52. Moreover, CLECs still receive LMU information within a matter of seconds – during March, April and May 2003, average response times remained under the 30-second target for requests with five or less loops in all four states. See Ehr IL Aff. ¶ 36; Ehr WI Aff. ¶ 35; Ehr OH Aff. ¶ 36; Ehr IN Aff. ¶ 34. With respect to PM-2-43, SBC Midwest has established an internal forum to focus on improvements to the response times for greater than five loops searched. Two issues are under investigation: (1) synching up internal timeouts and (2) resolution of a known CORBA problem, which requires third-party software involvement. SBC Midwest is actively pursuing a resolution for these two issues, and expects its performance under PM 2-43 to improve once these issues are resolved. See Cottrell/Lawson Joint Aff. ¶ 53.

Integration. As explained below, CLECs are able to integrate the EDI and CORBA pre-ordering interfaces with the EDI ordering interface. See Cottrell/Lawson Joint Aff. ¶¶ 56, 65, 81.

As an initial matter, this Commission has recognized that “providing pre-ordering information in a parsed format is a strong indicator that it is possible for competitive LECs to integrate.” California Order ¶ 82; see also Georgia/Louisiana Order ¶ 120. Each of the three pre-ordering interfaces discussed above provide CLECs with parsed CSIs, according to industry guidelines. See Cottrell/Lawson Joint Aff. ¶ 63. Moreover, the parsed fields are synchronized with the associated ordering fields, so that they can be directly mapped onto a Local Service Request (“LSR”) without the CLEC needing to adjust or reconfigure the fields. See id. ¶ 64.¹⁰³

CLECs’ ability to integrate was also confirmed in the third-party tests in each of the four states by BearingPoint. See id. Attachs. A-D ¶ 27. BearingPoint analyzed pre-ordering and ordering field content and field format to evaluate compliance with SBC’s documentation, and determined that SBC Midwest provides clear, accurate and complete pre-ordering responses. See id. BearingPoint was also able to populate, create and submit valid orders based upon the information received from these pre-orders. See id. This evidence clearly demonstrates that each of the four BOC applicants has “enable[d] successful integration.” Georgia/Louisiana Order ¶ 119 (emphasis omitted); see also id. ¶ 126 (relying on similar evidence); California Order ¶ 82.

¹⁰³ Every OBF-defined CSI pre-ordering field is parsed and completely synchronized with its associated ordering field. See Cottrell/Lawson Joint Aff. ¶ 64; see also California Order ¶ 82; Georgia/Louisiana Order ¶ 130.

b. Ordering and Provisioning

The BOC applicants provide CLECs operating in Illinois, Indiana, Ohio, and Wisconsin with a choice of two electronic interfaces for ordering and provisioning – EDI and LEX-GUI – as well as the option to send orders by fax. See Cottrell/Lawson Joint Aff. ¶¶ 76-79.¹⁰⁴

The EDI ordering gateway provides CLECs with an electronic interface that conforms to national standards and that supports the ordering and provisioning of both resale services and UNEs. See Cottrell/Lawson Joint Aff. ¶ 81. EDI enables a CLEC electronically to submit local service requests to the BOC applicants, and to receive acknowledgments, confirmations, and completion status utilizing its interface. See id. Further, as explained above, CLECs can integrate the EDI ordering gateway with EDI and CORBA to provide an integrated pre-ordering and ordering system. See id. In May 2003, CLECs originated a total of more than 680,000 service orders using the EDI ordering gateway. See id. ¶ 82. More than 6.7 million cumulative service orders have been generated via the EDI gateway since June 2002. See id., Attach. G (providing data by month for CLEC use of EDI over the last 12 months).

LEX is a graphical user interface developed for CLECs by SBC, based on industry standards, and launched from the SBC Toolbar platform. See id. ¶¶ 92-93. LEX provides CLECs with the same functionality that is offered by EDI. See id. ¶ 92. Specifically, LEX enables CLECs electronically to create and transmit resale and UNE LSRs to the BOC applicants, as well as to receive acknowledgments and notification of error details from SBC Midwest, and to track firm order confirmation (“FOC”) and service order completion (“SOC”)

¹⁰⁴ SBC Midwest additionally accepts electronic orders for local interconnection trunks and dedicated facilities using the Access Services Request process. See Cottrell/Lawson Joint Aff. ¶¶ 102-105.

status. See id. ¶ 92. In May 2003, CLECs originated more than 60,000 service orders through the input of LSRs directly into LEX. See id. ¶ 94. And since June 2002, more than 630,000 service orders have been generated by LEX. See id. & Attach. H (providing data by month for CLEC use of LEX over the last 12 months).

Firm Order Confirmations and Reject Notifications. Each of the BOC applicants provides CLECs operating in Illinois, Indiana, Ohio, and Wisconsin timely electronic FOCs and reject notices for those LSRs submitted electronically. See id. ¶¶ 109, 110, 112; Brown Aff. ¶¶ 24-27, 30. Indeed, the recent performance of the BOC applicants in returning timely FOCs has been excellent. Between March and May 2003, in Indiana, Ohio, and Wisconsin, the BOC applicants met the applicable benchmark in two out of the three months for almost every benchmark with CLEC activity.¹⁰⁵ See Ehr OH Aff. ¶ 39 (Ohio Bell met 20 out of 21 sub-metrics) & Attach. B (PM 5); Ehr WI Aff. ¶ 38 & Attach. B (PM 5) (Wisconsin Bell met 19 out

¹⁰⁵ Although each of the BOC applicants missed PM 5-14 (Percent Firm Order Confirmations (FOCs) Returned Within 5 Business Hours – Electronically Submitted Requests – Manually Processed – UNE-P Simple Residence and Business), CLECs were not denied a meaningful opportunity to compete. The BOC applicants' performance was strong in each state, returning a high percentage of these manually processed FOCs within 5 business hours. See Ehr IL Aff. ¶ 45 (Illinois Bell returned 89.3 percent within 5 hours); Ehr OH Aff. ¶ 39 (Ohio Bell returned 88.4 percent within 5 hours); Ehr WI Aff. ¶ 38 (Wisconsin Bell returned 86.2 percent within 5 hours); Ehr IN Aff. ¶ 37 (PM 6-15) (Indiana Bell returned more than 85 percent within 5 hours). Moreover, these manually processed FOCs generally represented only a small percentage of all electronically submitted requests for UNE-P FOCs. See Ehr OH Aff. ¶ 39 (12.1 percent of all electronic requests); Ehr WI Aff. ¶ 38 (7.2 percent of all electronic requests). Finally, between March and May 2003, the data for PM 6-15 – which measures the average time to return the manually processed FOCs covered by PM 5-14 – indicate that the average time required for CLECs operating in Illinois, Indiana, Ohio, and Wisconsin was well-below the 5 hour benchmark specified in PM 5-14. See Ehr OH Aff. ¶ 39 (Ohio Bell average return time did not exceed 1.29 hours) & Attach. B (PM 6-15); Ehr WI Aff. ¶ 38 & Attach. B (PM 6-15) (Wisconsin Bell average return time did not exceed 1.54 hours); Ehr IN Aff. ¶ 37 & Attach. B (PM 6-15) (Indiana Bell average return time did not exceed 1.25 hours); Ehr IL Aff. ¶ 45 & Attach. B (PM 6-15) (Illinois Bell average return time did not exceed 1.55 hours).

of 21 sub-metrics); Ehr IN Aff. ¶ 37 & Attach. B (PM 5) (Indiana Bell met 18 out of 20 sub-metrics); Ehr IL Aff. ¶ 39 & Attach. B (PM 5) (Illinois Bell met 25 of 30 sub-metrics).¹⁰⁶

For example, Illinois Bell, whose performance is typical of the other BOC applicants, timely returned 97.1 percent of FOCs for simple residence and business lines, 98.5 percent for UNE loops as a whole and 99.5 percent for line-shared DSL loops. See Ehr IL Aff. ¶ 38; see also Ehr OH Aff. ¶ 38 (Ohio Bell timely returned 97.2 percent, 98.6 percent and 99.3 percent of FOCs for each category, respectively); Ehr WI Aff. ¶ 37 (Wisconsin Bell timely returned 97.2 percent, 99.2 percent and 100 percent of FOCs for each category, respectively); Ehr IN Aff. ¶ 36 (Indiana Bell timely returned 94.0 percent, 98.8 percent and 99.6 percent of FOCs for each category, respectively). Moreover, in all four states during this three-month period, the average timely FOC return rate was 94 percent or higher, which clearly demonstrates that CLECs are receiving timely FOCs for their orders. See Ehr IL Aff. ¶ 38 (97.3%); Ehr OH Aff. ¶ 38 (97.3%); Ehr WI Aff. ¶ 37 (97.6%); Ehr IN Aff. ¶ 36 (94.2%). See also Brown Aff. ¶¶ 24-27 (discussing SBC Midwest's performance in returning FOCs for manually handled orders). See also Cottrell/Lawson Joint Aff., Attachs. A-D ¶ 34 (describing BearingPoint's third-party test result for FOC timeliness); id., Attachs. A-D ¶ 21 (finding all information returned by SBC Midwest on FOCs to be clear and accurate).

The BOC applicants have also returned timely reject notices. Notably, SBC Midwest implemented version 1.9 of the business rules in April 2003.¹⁰⁷ The performance of the BOC

¹⁰⁶ For those few sub-metrics (other than PM 5-14, which is discussed above in note 105, supra) that the BOC applicants missed, the shortfall was either very small or the volume was insubstantial, or both. See Ehr WI Aff. ¶ 39; Ehr IN Aff. ¶ 37; Ehr IL Aff. ¶¶ 40-44.

¹⁰⁷ With the implementation of Version 1.9 of the business rules in April, the following disaggregations were added to replace PM 10-01: PM 10-02 (Percent Rejects Returned Within 2

applicants under those new business rules has been excellent. For example, Ohio Bell met the benchmark for all three new sub-metrics for both April and May 2003. See Ehr OH Aff. ¶ 40. Illinois Bell, Wisconsin Bell and Indiana Bell met all but one of the sub-metrics, and only missed that lone sub-metric by a very small percentage. See Ehr IL Aff. ¶ 46 & Attach. B (missed PM 10-4 by 0.22% in April 2003); Ehr WI Aff. ¶ 40 & Attach. B (missed PM 10-03 by 0.30% in April 2003); Ehr IN Aff. ¶ 38 & Attach. B (missed PM 10-04 by 4.1% in May 2003).¹⁰⁸ Moreover, the average time needed to return rejects has been below the benchmark in all four states, which clearly demonstrates that CLECs are receiving timely rejects for their orders. See Ehr IL Aff. ¶ 46.¹⁰⁹ See also Cottrell/Lawson Joint Aff., Attachs. A-D ¶ 36 (describing BearingPoint's third-party test result for reject timeliness); id., Attachs. A-D ¶ 21 (finding all information returned by SBC Midwest on rejects to be clear and accurate).

Flow Through. The Commission has looked to flow-through rates as a general indicator of the performance of a BOC's OSS. See, e.g., New Jersey Order ¶ 130; Massachusetts Order ¶ 77; Ehr IL Aff. ¶¶ 47-50. The Commission, however, has focused on evidence that a BOC's OSS are capable of flowing through competing carriers' orders in substantially the same time and manner as its own orders. See Massachusetts Order ¶ 78.

Hours – Mechanized Rejects (A/A)), PM 10-03 (Percent Rejects Returned Within 8 Hours – Manual Rejects Received Electronically (A/M)) and PM 10-04 (Percent Rejects Returned Within 24 Hours – Manual Rejects received Manually (M/M)). See, e.g., Ehr OH Aff. ¶ 40.

¹⁰⁸ Notably, the volumes of manual rejects processed in Indiana are very small. If Indiana Bell had returned only 3 more of the 55 manual rejects received in May 2003, Indiana Bell would have met the benchmark for PM 10-3 that month. See Ehr IN Aff. ¶ 38 & n.37.

¹⁰⁹ See also Ehr IN Aff. ¶ 39; Ehr OH Aff. ¶¶ 41-42; Ehr WI Aff. ¶ 41.

The BOC applicants' flow-through performance demonstrates that it provides CLECs with parity of service. For example, over the period between March and May 2003, the overall flow-through rate was at least 94 percent in every state. See Ehr IL Aff. ¶ 47 (overall flow-through rate of 96.1%); Ehr WI Aff. ¶ 42 (overall flow-through rate of 96.6%); Ehr IN Aff. ¶ 40 (overall flow-through rate of 96.1%); Ehr OH Aff. ¶¶ 43 (overall flow-through rate of 94%).¹¹⁰ See also Cottrell/Lawson Joint Aff. ¶ 117. These flow-through rates are comparable to or better than rates that the Commission previously has found to satisfy the requirements of the Act. See Ehr IL Aff. ¶ 47; Ehr WI Aff. ¶ 42; Ehr IN Aff. ¶ 40; Ehr OH Aff. ¶ 43. This conclusion is also confirmed by BearingPoint's third-party tests. See Cottrell/Lawson Joint Aff., Attachs. A-D ¶ 28.

Despite the BOC applicants' consistently strong flow-through performance results, SBC Midwest continues to work closely with CLECs to improve flow through of CLEC orders, specifically focusing on: (1) adding new flow through capabilities; and (2) improving the efficiency of existing flow through capabilities. See Cottrell/Lawson Joint Aff. ¶ 120. See also id. ¶ 121 (listing recent flow through enhancements). As a result of these efforts, SBC

¹¹⁰ Ohio Bell missed the 95 percent benchmark for PM 13-01 (Order Process Percent Flow Through – UNE loops) between March and May 2003, achieving an aggregate flow through percentage of 87.85 percent, 87.21 percent and 89.58 percent for UNE Loops. See Cottrell/Lawson Joint Aff. ¶ 118. The miss was attributable to a consolidation of Billing Account Numbers ("BANs") being conducted for one particular CLEC, which caused an excessive number of requests to fall out for manual handling as the BANs were changing. See id. Notably, the occurrence of this scenario in Ohio seemed to be high between March and May 2003, which translated into a significant impact on flow through performance in Ohio. See id. Ohio Bell also failed to meet the parity benchmark in PM 13-03 (Order Process Percent Flow Through – UNE-P) in March by 1.23 percent, April by 1.28 percent and May by 5.22 percent. SBC Midwest identified a system error with requests for 900/976 blocking that caused Ohio CLEC UNE-P requests to fall out for manual handling. This condition was addressed as a defect and the fix was implemented with the May 30, 2003 release. Preliminary results indicate that the flow through performance for June is within parity range. See id. ¶ 119.

Midwest's flow through rates have generally continued to improve, particularly with respect to the products with the highest volumes.¹¹¹ See id. ¶ 122.

Jeopardy Notices. SBC Midwest's OSS can automatically generate an electronic jeopardy notification through EDI and LEX to the CLEC.¹¹² See Cottrell/Lawson Joint Aff. ¶ 78. The BOC applicants' performance in providing jeopardy notices confirms that CLECs are afforded a meaningful opportunity to compete.

The frequency with which jeopardy notices have been sent on CLEC orders has been low. For example, for UNE-P orders, which comprise the bulk of CLEC ordering volume in the four application states, CLECs experienced a jeopardy notice rate of 0.50 percent or less in each of the states. See Ehr IL Aff. ¶ 51 (0.50%).¹¹³ Jeopardy rates for UNE-loops and resold lines have also been very low. See id.¹¹⁴

¹¹¹ Although the BOC applicants did not meet the benchmark for every flow-through sub-metric between March and May 2003, their performance remained at a very high level overall, and CLECs were not denied a meaningful opportunity to compete. See Ehr IL Aff. ¶¶ 47-49; Ehr WI Aff. ¶¶ 42-43; Ehr IN Aff. ¶ 40-43; Ehr OH Aff. ¶ 43. Moreover, this Commission has repeatedly held that flow-through rates are not sole indicator of parity with respect to a BOC's ordering systems. Instead, the FCC has focused on factors that, while linked to order flow-through rates, are more directly indicative of a BOC's OSS performance. Rather, "a BOC's ability to return timely order confirmation and rejection notices, accurately process manually handled orders, and scale its systems is more relevant and probative . . . than a simple flow-through analysis." Texas Order ¶ 181. As discussed further in the affidavits of Jim Ehr, each of the BOC applicants return order status notices on a timely basis and accurately process CLECs' orders in a timely manner. See Ehr IL Aff. ¶ 50; Ehr WI Aff. ¶ 44; Ehr IN Aff. ¶ 44; Ehr OH Aff. ¶ 44.

¹¹² BearingPoint tested Michigan Bell's performance in returning jeopardy notices, and found that the information provided by Michigan Bell as part of jeopardy notices was clear, accurate, and complete. See Cottrell/Lawson Joint Aff., Attachs. A-D ¶ 35.

¹¹³ See also Ehr IN Aff. ¶ 45 (0.14%); Ehr OH Aff. ¶ 45 (0.27%); Ehr WI Aff. ¶ 45 (0.18%).

¹¹⁴ See also Ehr IN Aff. ¶ 45; Ehr OH Aff. ¶ 45; Ehr WI Aff. ¶ 45.

Completion Notifications. Once work for a service order is physically completed, that order is sent through the ASON system, which places the order into “Completion” status. See Cottrell/Lawson Joint Aff. ¶ 101. A SOC is then provided to the CLEC via EDI or LEX, depending on the interface the CLEC used to submit its order. See id. ¶ 114. The BOC applicants’ performance in providing CLECs with timely SOCs provides CLECs with a meaningful opportunity to compete. For resale, UNE, and combinations orders, in each month from March through May 2003, Ohio Bell, Wisconsin Bell and Indiana Bell satisfied the benchmark in at least two of the three months for all sub-metrics.¹¹⁵ See Ehr OH Aff. ¶ 46; Ehr WI Aff. ¶ 46; Ehr IN Aff. ¶ 46. See also Cottrell/Lawson Joint Aff., Attachs. A-D ¶¶ 37-38 (discussing BearingPoint’s third-party testing of SOC timeliness and implementation of Service Order Completion Timeliness Plan).

Line Loss Notifications. When SBC Midwest completes a service order that changes a customer’s local service provider from a CLEC that uses SBC Midwest’s facilities to provide service to another local service provider (including SBC Midwest), SBC Midwest will provide that CLEC with a line loss notification (“LLN”) to inform the CLEC of the change; the LLN is provided via whatever method the CLEC has chosen. See Cottrell/Lawson Joint Aff. ¶ 131. The LLN provided to the CLEC is the same LLN, containing the same information that is sent to SBC Midwest’s retail organization when it loses a customer to a CLEC. See id. Throughout

¹¹⁵ Illinois Bell missed the benchmark of 97 percent within 1 day of work completion for LNP orders in April and May 2003. See Ehr IL Aff. ¶ 53. Still, CLECs operating in Illinois were not denied a meaningful opportunity to compete. Illinois Bell missed the benchmark by only 0.41 percent in April and 2.08 percent in May. See id. Moreover, because stand alone LNP orders comprised only a very small percentage of all mechanized completion notices between March and May 2003 – less than 0.3 percent – Illinois Bell’s overall performance has been excellent. See id. Between March and May 2003, Illinois Bell returned over 99.4 percent of all mechanized completions within 1 work day of completion. See id.

2001 and 2002, SBC Midwest has worked to improve its line loss processes. See id. ¶ 133. The results can be seen in BearingPoint's successful third-party test of SBC Midwest's LLN processes, which found that CLEC loss of line activity was reported correctly. See id., Attach. A ¶ 46, Attach. B ¶ 47, Attach. C ¶ 47, Attach. D ¶ 46. Moreover, during the last three months, all four BOC applicants have achieved a high level of performance in returning mechanized LLNs within one day of work completion. See Ehr IL Aff. ¶ 57 (Illinois Bell met the benchmarks for PMs MI 13-05, MI 13-06, and MI 13-07).¹¹⁶

Notwithstanding SBC Midwest's nondiscriminatory performance in providing LLNs, SBC Midwest has nonetheless continued to respond directly to CLEC concerns by filing the Line Loss Notifier Communications Plan ("LLN Communications Plan") with the ICC, PSCW, PUCO and IURC. See Cottrell/Lawson Joint Aff. ¶ 134. The LLN Communications Plan is designed to improve communication with CLECs on LLN status, and requires SBC to issue an accessible letter to CLECs in the case of a "line loss interruption" that impacts more than one CLEC.¹¹⁷ See id.

SBC also agreed under the LLN Communications Plan to file monthly reports with each of the relevant four state commission regarding line loss issues. On June 10, 2003, SBC Midwest filed a report with the ICC and the Michigan Public Service Commission ("Michigan PSC"), detailing an LLN error that impacted a total of approximately 120 EDI LLNs sent to

¹¹⁶ See also Ehr IN Aff. ¶ 51; Ehr OH Aff. ¶ 50; Ehr WI Aff. ¶ 50.

¹¹⁷ A "line loss interruption" is defined to include LLNs that are determined to be missing (i.e., delayed more than 4 days), inaccurate (containing inaccurate or missing data, such as conversion dates or missing telephone numbers), improperly formatted (e.g. missing a required field) or improperly sent (i.e., sent via fax when the CLEC requested LEX transmission). See Cottrell/Lawson Joint Aff. ¶ 134.

seven CLECs in SBC's Midwest region. See id. ¶ 135. As discussed in more detail in the joint affidavit of Mark Cottrell and Beth Lawson, the problem began on May 18, 2003 and was corrected by May 20. See id. OSS CLEC Support managers notified all seven impacted CLECs individually; corrected LLNs were sent upon CLEC request.¹¹⁸ See id. Most recently, the LLN Reports filed on July 10, 2003, showed "nothing to report" for June 2003. See id. It is clear that SBC Midwest provides CLECs with nondiscriminatory access to LLNs. See also ICC Final Order ¶ 1338 (relying "heavily" on the LLN Communications Plan and other requirements and finding that "[Illinois Bell's] line loss notification procedures . . . comply with section 271 requirements.").

Provisioning. The systems and processes for provisioning most CLEC orders are the same as those used to provision retail orders for the BOC applicants. See Cottrell/Lawson Joint Aff. ¶¶ 78, 99; Muhs Aff. ¶¶ 5-8. As confirmed by BearingPoint, the BOC applicants are provisioning CLEC orders in a nondiscriminatory manner. See Cottrell/Lawson Joint Aff. ¶¶ 66-69; see also ICC Final Order ¶ 1338 ("Both SBC Illinois' commercial performance results, and the results of the OSS test, demonstrate that it provides nondiscriminatory provisioning."). The BOC applicants' provisioning performance "with respect to provisioning timeliness and . . . provisioning quality," Kansas/Oklahoma Order ¶ 154, are discussed in the affidavits of James D. Ehr for each state.¹¹⁹

¹¹⁸ See Accessible Letter CLECAM03-035 (May 21, 2003) (App. J, Tab 40).

¹¹⁹ Provisioning of unbundled loops is discussed infra Part III.D.

c. Maintenance and Repair

The four BOC applicants provide CLECs a choice of two electronic interfaces for maintenance and repair: Electronic Bonding Trouble Administration Graphical User Interface (“EBTA-GUI”) and Electronic Bonding Trouble Administration (“EBTA”). See Cottrell/Lawson Joint Aff. ¶ 139. Both of these interfaces provide CLECs with nondiscriminatory access to maintenance and repair functionality. See, e.g., ICC Final Order ¶ 1343 (“All total, SBC Illinois’ commercial performance results and the results of the OSS test demonstrate that [Illinois Bell] provides nondiscriminatory access to repair and maintenance functions.”).

EBTA-GUI is SBC’s web-based maintenance and repair GUI, which was implemented in SBC’s Midwestern states in December 2001 as part of SBC’s Uniform and Enhanced Plan of Record. See id. ¶ 140. EBTA-GUI is based on the industry-standard maintenance and repair application-to-application EBTA interface. See id. Using the EBTA-GUI, CLECs are able to conduct a Mechanized Loop Test; create a trouble ticket; obtain trouble status on a dynamic basis, without issuing a query; request cancellation of trouble tickets; modify trouble tickets; and obtain trouble history reports. See id. These are the same maintenance and repair functions available to SBC Midwest’s retail operations.¹²⁰ See id.; Muhs Aff. ¶¶ 9-12. See also Cottrell/Lawson Joint Aff., Attach. N (providing data by month for CLEC use of the EBTA platform over the last 12 months). CLECs are using EBTA-GUI at commercial volumes. From

¹²⁰ CLECs opting to use the EBTA application-to-application interface have the ability to integrate that interface with their own systems. See Cottrell/Lawson Joint Aff. ¶ 142. The same functions available through the EBTA-GUI are also available through the EBTA application-to-application interface, with the exception of trouble history and trouble lists. See id.

June 2002 through May 2003, CLECs used the EBTA platform to create more than 563,000 trouble tickets in the SBC Midwest region. See Cottrell/Lawson Joint Aff. ¶ 143.

The BOC applicants' maintenance and repair performance demonstrates that competing carriers are able to diagnose and process customer trouble complaints with the same speed and accuracy as SBC Midwest. For example, with respect to both POTS service and UNE-P, Ohio Bell, Indiana Bell and Wisconsin Bell met all but one of the benchmarks, while Illinois Bell met all but two of the benchmarks, for trouble report rate and missed repair appointments in at least two out of the three months from March through May 2003. See Ehr OH Aff. ¶¶ 118, 119, 123, 154, 155 & Attach. B (PMs 37-38) (Ohio Bell met 14 out of 15 sub-metrics); Ehr IN Aff. ¶¶ 112, 113, 117, 150, 151 & Attach. B (PMs 37-38) (Indiana Bell met 14 out of 15 sub-metrics); Ehr WI Aff. ¶¶ 115, 119, 150, 151 & Attach. B (PMs 37-38) (Wisconsin Bell met 15 out of 16 sub-metrics); Ehr IL Aff. ¶¶ 131, 134, 168 & Attach. B (PMs 37-38) (Illinois Bell met 14 out of 16 sub-metrics).¹²¹

Likewise, from March through May 2003, each of the BOC applicants met the relevant benchmark in at least two out of the three months for average time to restore service. See Ehr IL Aff. ¶ 133 & Attach. B (PM 39).¹²²

¹²¹ Although each of the BOC applicants missed the parity benchmark for PM 37-04 (Trouble Report Rate – UNE-P Business), in each state, the shortfalls were marginal and the overall trouble report rates were very low. See Ehr IL Aff. ¶ 131 & Attach. B (PM 37-04); Ehr IN Aff. ¶ 113; Ehr OH Aff. ¶ 119; Ehr WI Aff. ¶ 115. In any event, the performance of the applicant BOCs with respect to PMs 37.1-01 through 37.1-04, which measure trouble report rates net of installation and repeat reports, has been excellent. See Ehr IL Aff. ¶¶ 131, 168; Ehr IN Aff. ¶ 112, 150; Ehr OH Aff. ¶¶ 118-119; Ehr WI Aff. ¶¶ 115, 150.

¹²² See also Ehr OH Aff. ¶¶ 121, 122, 158 & Attach. B (PM 39); Ehr IN Aff. ¶¶ 115, 116, 154 & Attach. B (PM 39); Ehr WI Aff. ¶¶ 117, 118, 154 & Attach. B (PM 39).

d. OSS Support

CLECs in SBC's Midwestern states are offered a wide variety of information about, and assistance in using, its OSS, including its Local Service Center, Local Operations Center, Account Teams, CLEC OSS Training Organization, Information Services Call Center, Mechanized Customer Production Support Center, and OSS CLEC Support Team. See Cottrell/Lawson Joint Aff. ¶¶ 25-41; Brown Aff. ¶¶ 5-51; see also California Order ¶ 100. BearingPoint also performed a comprehensive review of the systems, processes, personnel, and technical support that SBC Midwest offers to assist CLECs in understanding and implementing the OSS functions, and confirmed that SBC Midwest's OSS provide CLECs with nondiscriminatory access to OSS support. See Cottrell/Lawson Joint Aff., Attach. A ¶¶ 57-58, Attach. B ¶¶ 58-59, Attach. C ¶¶ 58-59, Attach. D ¶¶ 56-57. BearingPoint found 131 out of 133 test criteria to be satisfied, with no test criteria found to be not satisfied. See id.

Materials and Training. SBC Midwest provides competing carriers with the specifications necessary for those carriers to design or modify their systems in a manner that will enable them to communicate with SBC Midwest's systems and CLEC interfaces. See Cottrell/Lawson Joint Aff. ¶¶ 25-31; see also New York Order ¶¶ 88 n.216, 106 n.290, 127 n.364; Second Louisiana Order ¶ 113. The adequacy of SBC Midwest's documentation is demonstrated by the fact a CLEC can establish its side of the EDI gateway and submit orders successfully, as well as the fact that SBC Midwest's EDI gateway handles substantial volumes of commercial EDI transactions. See Cottrell/Lawson Joint Aff. ¶ 186; see also Kansas/Oklahoma Order ¶ 152; Texas Order ¶ 120. In addition, BearingPoint was able to build, and use, both an EDI pre-order and order interface and a CORBA pre-order interface using SBC Midwest's documentation. See Cottrell/Lawson Joint Aff., Attach. A ¶ 65, Attach. B ¶ 66, Attach. C ¶ 66,

Attach. D ¶ 62. BearingPoint's third-party test also included a review and validation of SBC Midwest's CLEC training, for which BearingPoint found all criteria to be satisfied. See id., Attach. A ¶ 69, Attach. B ¶ 70, Attach. C ¶ 70, Attach. D ¶ 66; Texas Order ¶ 146.

Throughout its Midwest region, SBC also offers CLECs three OSS classes, with three class days of training. See Cottrell/Lawson Joint Aff. ¶ 29. Through 23 workshops, CLECs are also provided with an additional 30 days of training. See id. This training is provided as part of the 13-state SBC training program, although the instructors that work with CLECs in the four application states are specifically assigned to states in SBC's Midwestern region. See id. ¶ 25. All of the classes and workshops use the "Train the Trainer" format, enabling CLEC employees who attend the sessions to return to their businesses with the take-home information provided and, in turn, train their employees as appropriate. See id. ¶ 27; see also Texas Order ¶ 145 & n.391.

e. Change Management

SBC's 13-state Change Management Process ("CMP") was implemented in SBC's Midwestern states in March 2001. See Cottrell/Lawson Joint Aff. ¶ 145. This Commission has already reviewed SBC's 13-state Change Management Process ("CMP") (in the Arkansas/Missouri, California, and Nevada 271 proceedings) and found it be checklist compliant. See id. BearingPoint reviewed the CMP, documentation, and SBC's performance, and it found all criteria to be satisfied. See id., Attach. A ¶¶ 57-66, Attach. B ¶¶ 58-67, Attach. C ¶¶ 58-67, Attach. D ¶¶ 56-63. Accordingly, there can be no doubt that the SBC's CMP satisfies Commission requirements. See, e.g., ICC Final Order ¶¶ 1359-1362 ("[W]e find that [Illinois Bell] has fully complied with its CMP obligations.").

SBC has also demonstrated a pattern of compliance with its CMP. Indeed, as confirmed by SBC's recent implementation of Local Service Order Guidelines ("LSOG") 6, that record of compliance has continued through the filing of this Joint Application. See Cottrell/Lawson Joint Aff. ¶¶ 155-157. The CMP also provides CLECs with a means to submit change requests and has handled CLEC change requests ("CCRs") in compliance with the CMP.

Moreover, SBC continues to work to improve its CMP in ways directly responsive to CLEC concerns. For example, SBC has worked collaboratively with CLECs under the auspices of the Michigan PSC to implement the Change Management Communications Plan ("CMCP"), which sets forth a process for providing CLECs with notice of CLEC-impacting programming changes made outside of the normal release schedules. As explained below, the CMCP will ensure that CLECs are provided appropriate notice whenever SBC makes certain programming changes on its side of the interface that could affect the way in which CLECs must operate when communicating with SBC's OSS. See id. ¶¶ 164-184.

Compliance With Change Management. As confirmed by BearingPoint SBC has demonstrated a pattern of compliance with the requirements set forth in the CMP. See Cottrell/Lawson Joint Aff., Attach. A ¶ 66, Attach. B ¶ 67, Attach. C ¶ 67, Attach. D ¶ 63. This record of compliance was most recently confirmed during SBC's implementation of its latest quarterly release – LSOG 6 for pre-ordering (LSPOR version 6.00) and ordering (LSOR version 6.00)¹²³ – which was implemented on June 14, 2003, and includes several functionality enhancements over prior LSOG versions. See Cottrell/Lawson Joint Aff. ¶ 155; id. ¶ 158 (listing

¹²³ Local Service Pre-Ordering Requirements ("LSPOR") and Local Service Order Requirements ("LSOR") are requirements developed by SBC Midwest for implementation of the OBF LSOG. See Cottrell/Lawson Joint Aff. ¶ 35 n.11.

enhancements). SBC has complied with all CMP notification, documentation, and testing requirements that apply to the LSOG 6 release. See id. ¶¶ 156-157.

SBC also accepts, prioritizes, and weights for implementation purposes CLEC-initiated change requests in accordance with CMP requirements. See id. ¶¶ 148-151. The CMP allows CLECs to submit CCRs to request changes to OSS or LSPOR/LSOR business rules, and allows for input in the prioritization of CCRs. See id. ¶¶ 148-49. Moreover, information on the status of CCRs is provided on SBC's CMP web site, as well as at each monthly CMP meeting. See id. ¶ 151. Further, not only has SBC implemented a substantial number of CLEC-initiated change requests – approximately 180 since 1998 – SBC also has implemented a large number of changes, such as several flow through enhancements, that have been negotiated directly with the CLECs and have a direct CLEC benefit. See id. ¶ 152.¹²⁴ Thus, WorldCom's recent complaint that SBC fails either to implement CCRs or to inform CLECs of the status of their requests in a reasonable time frame is incorrect.

Implementation of the Change Management Communications Plan. During SBC Midwest's section 271 application for Michigan, some questions were raised about certain programming changes on SBC Midwest's side of the interface that may have resulted in unintended impacts on CLEC-ordering transactions. See Cottrell/Lawson Joint Aff. ¶ 164. To address these CLEC concerns, SBC worked collaboratively with CLECs under the auspices of the Michigan PSC and developed processes to provide CLECs with notice of CLEC-impacting

¹²⁴ In addition to the CMP, SBC also holds CLEC User Forum ("CUF") meetings in all four SBC regions. The CUF provides another forum for open discussion between SBC and the CLEC community regarding operational issues and processes. See Cottrell/Lawson Joint Aff. ¶ 154.

programming changes made outside of normal release schedules. See id. ¶¶ 164-184.¹²⁵ The CMCP – which has now been implemented on a 13-state basis – has been filed with all four state commissions. See id. 168.¹²⁶

The CMCP contains a number of measures that respond specifically to CLEC concerns, including: (1) use of an Exception Request Accessible Letter to provide CLECs with notice of new edits for existing business rules and for changes to EDI mapping and CORBA Interface Definition Language (“IDL”); (2) creation and posting on CLEC Online of the Enhanced Defect Report (“EDR”); (3) development and implementation of a training program for SBC personnel; and (4) development and documentation of rigorous methods and procedures for testing of system changes. See Cottrell/Lawson Joint Aff. ¶ 168. These and other measures, which are discussed in detail in the Cottrell/Lawson Joint Affidavit, are contained in eight “action plans” within the CMCP; these are in addition to the already existing notification and communication processes contained in the 13-state CMP. See id. See also id. ¶¶ 169-184 (addressing the eight action plans in detail).

On April 30, 2003, SBC filed its first quarterly status report informing the Michigan PSC of SBC’s status of implementing and complying with the CMCP. See id. ¶ 169. The status report reflected that SBC had completed all “action plan” requirements scheduled for completion within the current reporting period in accordance with the terms of the CMCP. See id. More

¹²⁵ See BellSouth Five-State Order ¶ 182 (“The change management process is designed, by nature, as an evolving one, and we are confident that it is continuing to improve, as evidenced by the changes agreed to by BellSouth, CCP participants, and state commissions.”) (footnote omitted).

¹²⁶ See also Johnson Aff. ¶ 22; Butler Aff. ¶ 20; McKenzie Aff. ¶ 18; VanderSanden Aff. ¶¶ 21-22.

importantly, SBC's implementation of and compliance with the CMCP directly addresses the issues raised by CLECs regarding notice of certain CLEC-impacting interface changes made outside of quarterly releases. See id. ¶ 184.

Testing Environment. SBC likewise provides CLECs access to a stable testing environment that allows carriers to certify that their OSS will interact effectively with SBC's OSS. See Cottrell/Lawson Joint Aff. ¶¶ 189-199; see also Kansas/Oklahoma Order ¶ 168; Texas Order ¶ 133. The testing environment mirrors the production environment and affords competing carriers an opportunity to test representative pre-ordering and ordering transactions. See Cottrell/Lawson Joint Aff., Attach. A ¶ 64, Attach. B ¶ 65, Attach. C ¶ 65, Attach. D ¶ 61; see also Kansas/Oklahoma Order ¶ 168. Additionally, BearingPoint conducted an extensive test of the CLEC Test Environment and the test procedures during the third-party test, and found all criteria to be satisfied. See Cottrell/Lawson Joint Aff., Attach. A ¶ 64, Attach. B ¶ 65, Attach. C ¶ 65, Attach. D ¶ 61.

Versioning. SBC's approach to implementing versioning was negotiated as part of the SBC 13-state CMP collaborative process, and is the same versioning policy reviewed by the FCC in the Arkansas, Missouri, California, and Nevada 271 proceedings. See Cottrell/Lawson Joint Aff. ¶ 200. Currently, SBC supports three versions of software for pre-ordering and ordering application-to-application interfaces, including one "dot" version and two LSOG versions. See id.

During the initial Michigan 271 application, AT&T complained that SBC's versioning model, which is based on Operating Company Number ("OCN") and requires that a CLEC operate on a single LSOR version, violates the non-discrimination requirements of the Act. AT&T asked that SBC implement versioning at the Trading Partner ID ("TPID") level, which,

AT&T argued, would allow Covad to submit LSRs on AT&T's behalf using a different LSOR version than that used by AT&T. See id. ¶ 202. This issue was discussed thoroughly at the April 3, 2003 CMP meeting, where SBC suggested that the issue could most effectively be addressed through an LSR-based agency arrangement, whereby the LSR would be modified in a manner that would allow a third party to submit orders on behalf of a CLEC, using a different LSOR version than that used by the CLEC.¹²⁷ See id. ¶ 203. SBC's proposal would not only directly address AT&T's concern, but it would also not require any changes to SBC's versioning model. See id. ¶¶ 204-06.

Based on this discussion, all CLECs attending the meeting (including AT&T and WorldCom) agreed that the issue of third-party ordering should be addressed "outside of the versioning arena." Id. ¶ 206. SBC and CLECs have since reviewed the detailed business rules for this proposal, and SBC has committed to implement it in the quarterly release currently scheduled for March 13, 2004, barring any unforeseen events. See id. ¶ 207. SBC and CLECs also continue to work together through the CMP to discuss possible changes to SBC's versioning model designed to address CLEC business needs other than third-party agency arrangements. See id. ¶¶ 208-09.

¹²⁷ Specifically, SBC proposed to utilize the OBF-defined Local Service Provider Authorization ("LSPAUTH") field and the Company Code ("CC") field on the LSR to denote which entity is placing the order and which entity is the account owner. The LSPAUTH field would contain the CC for the existing owner of the account. The CC field on the LSR would be populated with the Company Code of the entity originating the LSR. The LSPAUTH would be validated against SBC's records to ensure the value matched the CC on the current account. The billing would continue to be under the CC contained in the LSPAUTH field. Confirmations, Completions, PIRs and Post to Bills would be returned to the originator of the request, or the OCN in the CC field. See Cottrell/Lawson Joint Aff. ¶ 204.

Based on the above, it is clear that the close collaboration between SBC and the CLEC community in addressing this versioning issue further serves to demonstrate that the CMP is the appropriate forum for ensuring that the needs of all CLECs (as opposed to just one or two) and of SBC are considered in negotiating changes to SBC's systems. SBC complies with its CMP obligations, and will continue to work with the CLECs to obtain resolution of this issue through the CMP. See id. ¶ 211.

f. Billing

In a series of comprehensive, painstaking tests in each of the Midwest states, BearingPoint reviewed SBC Midwest's wholesale billing systems, interfaces, processes, and procedures, including the systems utilized by SBC Midwest to bill CLECs for wholesale products and services. These wholesale billing systems, processes, and procedures that BearingPoint tested in each of the five states in the SBC Midwest region are the same. See Brown/Cottrell/Flynn Joint Aff. ¶¶ 9-23, 30-31. Consistent with the requirements of the Master Test Plans developed in each state in collaboration with the CLECs and approved by each of the state commissions, the billing test consisted of a comprehensive processes and procedures review ("PPR") and a complete transaction verification and validation ("TVV") of the documentation, processes, procedures, and operations of SBC Midwest's wholesale billing systems.¹²⁸ Based

¹²⁸ Order, Joint Application for Approval of the Reorganization of Illinois Bell Telephone Company d/b/a Ameritech Illinois, and the Reorganization of Ameritech Illinois Metro, Inc. in Accordance with Section 7-204 of the Public Utilities Act, Docket No. 98-0555 (ICC Sept. 23, 1999) (App. M, Tab 27); Order, Petition of Indiana Bell Telephone Company, Incorporated, d/b/a Ameritech Indiana Pursuant to I.C. 8-1-2-61 for a Three-Phase Process for Commission Reviews of Various Submissions of Ameritech Indiana To Show Compliance with Section 271(c) of the Telecommunications Act of 1996, Cause No. 41657 (IURC Mar. 19, 2001) (App. C-IN, Tab 19); Entry, Investigation into Ameritech Ohio's Entry into In-Region InterLATA Service Under Section 271 of the Telecommunications Act of 1996, Docket No. 00-942-TP-COI, (PUCO Dec. 7, 2000) (App. M, Tab 44); Order, Investigation into Ameritech Wisconsin

upon the results of these five separate, comprehensive, independent third-party billing tests, BearingPoint found that SBC Midwest satisfied 100 percent (95 of 95) of the applicable test criteria in each test. See id. ¶ 25 & n.12.

The BearingPoint billing tests in the Midwest region began in March 2001 and were, for the most part, completed by the end of 2002 and early 2003. See id. ¶ 33 & nn.20-25. One of the tests that BearingPoint was engaged to perform was to measure whether UNE-P bills reflected the timely posting of UNE-P billing service orders into the billing systems. But BearingPoint determined that this particular test was one that had to be postponed in light of the commitment that SBC had made to convert all of its UNE-P billing accounts to the CABS database. Between August and October 2001 – that is, in the middle of BearingPoint’s review of the billing systems – SBC was required to undertake this UNE-P CABS conversion, which proved to be an enormously complicated project. See id. ¶¶ 43-58. Rather than try to test the timeliness of the posting of UNE-P billing service orders at the same time that UNE-P billing accounts were being converted to CABS, BearingPoint, in consultation with the state commissions and SBC, concluded that it should wait until after the conversion was completed.

When BearingPoint finally tested whether UNE-P billing service orders were being timely posted to CABS and reflected on UNE-P bills in Illinois, Indiana, Ohio, and Wisconsin – between February and March 2002 – the effects from the one-time UNE-P CABS conversion were still being felt. See id. ¶ 39. Not surprisingly, the results of that particular test were poor and led to the issuance of a BearingPoint exception. Throughout the spring and early summer of 2002, however, SBC made a number of critical modifications to its systems and procedures to

Operational Support Systems, Docket No. 6720-TI-160 (PSCW Nov. 28, 2000) (App. M, Tab 43).

permit the increasingly timely posting of UNE-P billing service orders into CABS. By the time BearingPoint conducted a retest in Indiana, Illinois, and Wisconsin – from August to October 2002 – SBC easily passed the test.¹²⁹ Subsequently, based upon SBC’s representation (and upon its own experience) that the SBC Midwest billing systems and processes are the same, BearingPoint recommended that the results achieved in Illinois, Indiana, and Wisconsin be included in the test results for Ohio. See id. ¶ 42.¹³⁰

Although the issues relating to the conversion were substantially resolved by the time that BearingPoint conducted its retesting of the timely posting of UNE-P billing service orders to CABS in the August to October 2002 timeframe (thereby accounting for the remarkable results that BearingPoint achieved on the retest), there remained a number of UNE-P records in CABS that were inconsistent with the corresponding records in ACIS. See id. ¶ 57. As explained to the CLECs, SBC determined that a final reconciliation of the two databases was necessary.¹³¹ That ACIS/CABS reconciliation took place during January 2003, and SBC made corresponding adjustments to the CLEC bills. See id. ¶¶ 57-58.

After SBC withdrew its initial Michigan Application, it engaged E&Y to review the reconciliation process to determine whether it had, in fact, performed as SBC intended and whether the UNE-P bills generated by CABS today are generally accurate and reliable. E&Y has

¹²⁹ BearingPoint determined that the “Billing Test CLEC’s” UNE-P service order activity was timely posted to the bills 97.1 percent of the time in Illinois and 100 percent of the time in both Indiana and Wisconsin. Consequently, BearingPoint determined that the issues raised by its earlier exception had been addressed in a satisfactory manner and that SBC Midwest satisfied this test criterion in these three states. See Brown/Cottrell/Flynn Joint Aff. ¶ 41.

¹³⁰ BearingPoint’s Ohio OSS Evaluation Project Report at 815-16 (May 23, 2003) (App. C-OH, Tab 126).

¹³¹ See Accessible Letter CLECAM02-509 (Nov. 21, 2002) (App. I, Tab 35).

now completed its review and has verified that SBC's methodology used to conduct the reconciliation was implemented appropriately in Illinois, Indiana, Ohio, and Wisconsin.¹³²

Id. ¶¶ 59-82.¹³³ In addition to its thorough validation of the reconciliation, E&Y also validated a statistically valid sample of current circuits to ensure that the records in ACIS and CABS match one another. See id. ¶¶ 83-84; Horst June 2003 Supp. Aff., Attach. B at 8, Attach. C at 11-12. E&Y found that 99 percent of the CABS records are identical to the corresponding records in ACIS. See Brown/Cottrell/Flynn Joint. Aff. ¶ 83; see also Ex Parte Letter from Geoffrey M. Klineberg, Kellogg, Huber, Hansen, Todd & Evans, P.L.L.C., to Marlene H. Dortch, FCC, WC Docket No. 03-16, Attach. A at 5 (Apr. 3, 2003) (App. M, Tab 157). These results are remarkable, given that SBC had processed more than 1.7 million service orders between the time the ACIS/CABS reconciliation was completed in January 2003 and the end of April 2003. See id.¹³⁴

¹³² See Brown/Cottrell/Flynn Joint Aff., Attach. F (Supplemental Affidavit of Brian Horst, WC Docket No. 03-138 (FCC filed June 19, 2003) ("Horst June 2003 Supp. Aff.")), Attach. B at 4-8.

¹³³ E&Y also validated the accuracy of the adjustments to the bills that SBC Midwest made as a result of the reconciliation. Although E&Y found that the adjustments were calculated correctly, it noted some discrepancies in the "effective dates" that SBC utilized to back bill or credit particular CLECs. These discrepancies had nothing to do with the CABS billing system or with the underlying rate tables. See Brown/Cottrell/Flynn Joint Aff. ¶ 74. Rather, they were the result of errors in interpreting specific contracts when determining how far back to credit or debit the CLEC's account. As a result of E&Y's review, SBC has undertaken corrective action. See id. ¶ 75. E&Y has validated the accuracy of these corrections. See id. ¶ 76; Horst June 2003 Supp. Aff., Attach. B at 5-8.

¹³⁴ In order to ensure that the ACIS and CABS databases remain in sync, SBC proposed at the last SBC Midwest Billing collaborative (June 26, 2003) the adoption of a new performance measurement to calculate the percent of ACIS UNE-P provisioning records that match the corresponding CABS UNE-P billing records. See Brown/Cottrell/Flynn Joint Aff. ¶ 85 & Attach. E.

SBC also engaged E&Y to verify the accuracy of the data that SBC presented in the original Michigan proceeding regarding the percentage of billing service orders that posted mechanically to CABS. See Horst June 2003 Supp. Aff., Attach. B at 9, Attach. C at 15-16. E&Y has validated SBC's data indicating that SBC's mechanized posting of billing service orders improved from 71 percent in March 2002 to 96 percent by March 2003. See Brown/Cottrell/Flynn Joint Aff. ¶ 87. With these improvements in mechanized posting, SBC has reduced the potential for error resulting from manual handling and greatly increased the volume of orders that post without the need for LSC intervention. See Brown/Cottrell/Flynn Joint Aff. ¶¶ 86-87.

SBC has established a comprehensive process for ensuring that the rate tables used to bill its customers are updated in a timely and accurate manner. See id. ¶¶ 90-93. E&Y has now extensively validated the accuracy of SBC Midwest's rating of UNE billing elements, including monthly recurring charges, non-recurring charges, and usage rates from the CLECs' bills through to the applicable interconnection agreement or tariff. See Horst June 2003 Supp. Aff., Attach. B at 8-9, Attach. C at 12-15, 31-33. As part of its validation, E&Y selected a sample of UNE and UNE-P circuits from the CABS database and tested them to ensure that the rates appearing on those bills accurately reflect the rates that should be charged to the CLEC, based upon the rate tables in CABS and the individual interconnection agreement or tariff applicable to that CLEC. See id., Attach. C at 12-14. For the monthly recurring charges, E&Y tested more than 4,800 USOCs and found an overall accuracy rate of greater than 98.4 percent. See Brown/Cottrell/Flynn Joint Aff. ¶ 98. For non-recurring charges, out of more than 600 USOCs sampled, E&Y found an overall accuracy rate of greater than 98.6 percent. See id. ¶ 100. With

respect to its usage testing, E&Y identified an accuracy rate of greater than 96.8 percent. See id. ¶ 102.¹³⁵

Finally, E&Y tested a sample of rates from contracts that had been updated since January 2003 to ensure that SBC has processes in place to update rates in newly approved interconnection agreements. E&Y's testing results produced only a 1 percent error rate, confirming that SBC updates new rates with a high degree of accuracy. See id. ¶ 104; Horst June 2003 Supp. Aff., Attach. C at 14-15.

Notwithstanding the fact that SBC provides reliable, auditable, and accurate bills, CLECs will continue to complain about them. SBC Midwest has specific processes and procedures in place to resolve any billing disputes that arise. See Brown/Cottrell/Flynn Joint Aff. ¶¶ 134-140.¹³⁶ Both the BearingPoint tests and E&Y's recent validations confirm that SBC Midwest's

¹³⁵ Approximately half of the usage errors arose out of a single mistake in implementing an order of the Indiana Utility Regulatory Commission. See Brown/Cottrell/Flynn Joint Aff. ¶ 102 & n.93. If these Indiana errors were removed from the calculation, E&Y would have found that SBC Midwest's billing of usage is more than 98.4 percent accurate. See id. ¶ 102; Horst June 2003 Supp. Aff., Attach. B at 9, Attach. C at 32. In addition, because of this usage issue in Indiana, SBC engaged E&Y to perform additional testing. Specifically, E&Y validated the accuracy of SBC's corrective action to the CABS rate table and tested 100 percent of the unbundled local switching usage rates utilized to bill CLECs in Indiana. See Horst July 2003 Aff. (App. A, Tab 28), Attachs. D & E. E&Y audited the CABS usage rate tables and interconnection contracts involving 30 CLECs, more than 150 billing account numbers, and more than 900 usage rates. E&Y confirmed that the rates utilized to calculate unbundled local switching usage charges associated with UNE-P circuits are in agreement with all applicable rates in the CLEC interconnection agreements or tariffs as of June 24, 2003. See id., Attach. F at 4.

¹³⁶ The BOC applicants have fully complied with the modified compliance plans regarding billing auditability and dispute resolution and continue to work on improvements. See Brown/Cottrell/Flynn Aff. ¶¶ 137-138. As part of those plans, the BOC applicants have participated in the CLEC Billing subcommittee of the CLEC User Forum ("CUF") to address with CLECs the resolution of billing dispute issues. More than 56 CLEC billing issues have been raised since the Billing subcommittee formed in the CUF on February 19, 2003, and 29 of

processes and procedures result in accurate wholesale bills. The disputes that inevitably arise are not the result of systemic billing failures but, instead, generally fall into readily identifiable categories: there are disputes over the proper interpretation of the terms of interconnection agreements; there are disputes about how a specific rate should be applied; and there are typically a number of inevitable misunderstandings and human errors on both sides that lead to billing inaccuracies of one sort or another. When any such errors are identified – either unilaterally by SBC Midwest or as a result of the established dispute resolution process – those errors are resolved. See id. ¶¶ 141-149.¹³⁷

Billing disputes are a commercial fact of life; there is nothing strange or unusual about SBC's experience in the Midwest on this score. Indeed, the percentage of bills that have been disputed by CLECs over the past 17 months (i.e., from the beginning of January 2002 through the end of May 2003) in Illinois, Indiana, Ohio, and Wisconsin is comparable to the dispute rate in other states that have received section 271 approval. See id. ¶ 131.¹³⁸ More importantly, the simple fact that a CLEC disputes a bill is not evidence that there is a systemic problem with the billing systems. CLECs dispute their bills for a variety of reasons, many of which have nothing

those issues have been fully resolved. The parties have been actively discussing the remaining issues, most recently at the subcommittee meeting held on June 12, 2003. See id. ¶ 140.

¹³⁷ See, e.g., Brown/Cottrell/Flynn Joint Aff. ¶¶ 105-126 (discussing various issues uncovered through the investigation of CLEC billing claims that SBC has corrected and that E&Y has validated); Horst June 2003 Supp. Aff., Attach. B at 14-15, Attach. C at 24-27; Horst July 2003 Aff., Attach. B at 1-6, Attach. C at 2-11.

¹³⁸ For a detailed discussion of the nature of the current billing disputes, as well as a rebuttal to specific CLEC allegations that have surfaced relating to billing, see Brown/Cottrell/Flynn Joint Aff. ¶¶ 128-185.

to do with the capability of the billing systems to calculate and issue accurate bills based on the information that has been inputted into those systems.

As of July 1, 2003, the total amount in dispute between SBC Midwest and CLECs in Illinois, Indiana, Ohio, and Wisconsin was approximately \$30.4 million. Those claims fall into several broad categories: approximately \$6.9 million relate to the disputes over the proper interpretation of interconnection agreements; approximately \$12.9 million relate to CLEC allegations that they have been charged an inappropriate rate for a particular service; and the remainder falls into categories such as amounts relating to the ACIS/CABS reconciliation and other miscellaneous issues. See id. ¶ 142. SBC Midwest is addressing all of these issues through its billing dispute resolution process. See id. ¶¶ 143-149. It is the LSC that is responsible for answering billing claim inquiries, processing adjustments for incorrect bills, and otherwise resolving CLEC billing disputes. The process is designed to be as efficient and standardized as possible, while remaining flexible enough to address the myriad billing issues and questions that arise. SBC follows the same billing dispute resolution process throughout its 13-state region, including SBC Midwest and those states that have already received section 271 approval. See id. ¶ 134.

C. Checklist Item 3: Poles, Ducts, Conduits, and Rights-of-Way

Section 271(c)(2)(B)(iii) requires a BOC to provide “[n]ondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned or controlled by the [BOC] at just and reasonable rates in accordance with the requirements of [47 U.S.C. §] 224.” 47 U.S.C. § 271(c)(2)(B)(iii). Each of the applicant telephone companies provides such access in a manner consistent with their obligations under Checklist Item 3. See Stanek Aff. ¶¶ 9-27 (App. A, Tab 38).